Steps for a Thorough Feasibility Study

The Feasibility Study helps determine whether the project being considered is technically, financially, and operationally viable. The Feasibility Study consists of presenting your business case, and performing a thorough Alternatives Analysis that includes gap analyses and a cost analysis. These steps are intended as a guide to prepare a complete and thorough Feasibility Study. The Feasibility Study is a required component of the Implementation Advance Planning document (IAPD) for SNAP projects. WIC projects require submission of a complete Feasibility Study for approval prior to submission of the IAPD.

The starting point of a Feasibility Study is the Alternatives Analysis.

A State agency must perform an analysis of alternatives for hardware, software, and program functionality to determine the type of system that best meets its needs.

- What are alternatives? They can be almost anything you believe is feasible. WIC must consider a SAM system transfer with as little change in functionality as possible.

FNS recommends a minimum of three alternatives. Below are some examples:

- Is it possible to upgrade or enhance your existing system? States should consider this alternative. If it is not an option open to you, an explanation why it is not must be included with the alternative analysis.

- Transfer of another State system; this may include the entire system or only some components (best of breed). Some things to remember when considering a transfer system are:

    - State agencies need to analyze obstacles to the transfer and modification of an existing system.

    - Compare the costs of overcoming the problem(s) in transferring an operational system to the costs of developing a new system.

    - Pay attention to what the cumulative cost of "tweaking" a transfer system may be. States sometimes start with a transfer when they really want a ground up build. In some cases transfers can end up costing the same if not more than an original build, or the original cost of the transfer system

    - Is it possible or in the best interest of the program to change/update existing business processes. This may reduce the number of changes required to a transfer system.

    - Developing a new system – this needs to happen at some point – encourages innovation, brings systems up-to-date with latest technology.

<u>Now you know what Alternatives are, but WHAT are you comparing?</u>

Remember you are looking at the technical, financial, operational, and functional differences between the alternatives and your requirements.

- What impacts will the alternative have on any existing systems or interfaces that you need to conduct business? EBT? Information verification processes? Data sharing? Other State Health Care systems?

- What effect will the alternative have on existing personnel and the skills required? Will there be an impact on the number of staff required? Will there be a big learning curve for staff? Do you need to hire staff with different skill sets? How much training will be required to bring current staff up to speed?

- Will data conversion activities add cost to the project? What about data cleansing? You will need to look at the time it may take to reformat the data, add missing elements, etc. This can take a lot of staff time and requires careful planning.

How do you do the Alternatives Analysis?

We really can't stress the importance of the functional gap analysis enough – especially when we all are looking to reduce the costs of systems by minimizing the number of changes or customization that has to occur to a transfer system. Each alternative needs to have a gap analysis performed to compare its existing functionality with the State's required functionality. The gap analysis is extremely helpful to determine missing or weak functionality in any systems being considered. This also goes for technical requirements of the system. This can dictate the best fit for your State, your budget, and your schedule.

Once the gap analysis is performed for each alternative, then the alternatives may be measured against one another, this is where you should clearly see the best fit solution. If not then you may need to review the alternatives selected and your mandatory and optional requirements,

You developed your Functional Requirements Document (FRD) – now use it to measure the alternatives. How well do they fit your need? Get a working version of the alternative system if possible, and the documentation. Perform the analyses to make sure the system will meet your needs.

- Perform **a gap analysis** of program functional and technical requirements. ***It is important to be sure to apply the exact same analysis methodology for each alternative you examine***

    - When you perform your gap analysis of functionality include your subject matter experts in the discussions and review. Review your Functional Requirements Document, Make a list of mandatory – absolute – functionality that you can't live without. ***Does it exist in the alternative?*** Are you willing to pay to have it developed? Make sure you include Federal and State requirements on this list. Don't cut corners on this list but be realistic about what is mandatory.

    - Make a list of "nice to have" functionality that may be used as trade-offs when it comes to selecting a best fit alternative. Or, they can become your enhancement list.

    - REMEMBER, especially for a WIC SAM transfer using SAM grant funding, we are looking for minimal changes to the functionality.

    - Analyze how many changes would be needed for each alternative to meet your needs.

    - Define your goal to meet your needs for a more efficient process.

In many cases, the most cost-effective alternative is a transfer with minimal changes. The software/code modifications are where the big costs are in development. This is why we rarely see a complete ground-up build. Under-estimating the amount of work and/or the number of changes needed to make a transfer system fit the State's needs is one of the major reasons why system transfers have floundered in the past.

The gap analysis really has two parts, and both are critical for you to choose the right system.

- How big is the gap between your future vision (the "to be" scenario) and each of the available options?
- How big is the gap between your starting point (the "as is" scenario plus your budget and resources) and each of the available options? These are your constraints – you can only spend so much, and only have a certain period of time to get the system implemented.

Alternatives must also include the analysis of technical and programmatic merits of possible system transfers:

- Will you be able to use existing equipment or will you need to purchase new PCs and/or servers? What about your communications infrastructure - will it support the alternative?
- Are there trade-offs that can be made between technology and your business processes? If you change your business process, will it minimize the potential changes to a system?

Sometimes technology isn't the total solution. You may need and want to change your business processes – you can gain efficiencies there as well as with a new system.

Cost Analysis

The final step in completing the Feasibility Study is doing a cost analysis (see Figure 2.12).
The cost analysis falls under Fiscal Impacts and is done for all proposed systems. It should**:**

- Describe cost factors that may influence the development, design, and continued operation of the proposed system(s)
- Identify the estimated total developmental cost and estimated annual operating costs and who will pay for these expenses

Feasibility Study

So……

- When you've compared each of your alternatives to your requirements,
- Really considered the gap between each alternative and the desired future or "to be" plus the cost of closing that gap, as well as the difference between each alternative and your "as is" or current environment and the cost of closing that gap,
- Done the cost analysis on any options that appear feasible,
- And chosen the best option for you …..

Then you are ready to write your Feasibility Study with your completed alternatives analysis, and clearly demonstrate which alternative is the best fit for you, - and why - technically, financially, and operationally. For further assistance see Appendix D for Feasibility Study or click on: http://www.fns.usda.gov/apd/Handbook_901/V_1-3/AppendixD-FS-AA.pdf and CBA worksheets or click on: http://www.fns.usda.gov/apd/Handbook_901/V_1-3/AppendixD-CBA.pdf_1-3/AppendixD-CBA.pdf.

Cost Benefits Analysis (CBA)

Because more than one system may be functionally, technically and operationally feasible, the State needs another tool to help select the best system.

It can be easy to confuse the CBA with the feasibility study as both require the State to analyze and compare alternative systems. The cost analysis done in the Feasibility Study will feed into the CBA. The CBA focuses specifically on the costs of each of those systems relative to their benefits in that it will:

- Determine which alternative will provide the greatest benefits relative to its costs.
- Identify the tangible and intangible benefits.
- Provide the estimated cost of developing and operating each alternative.

FNS CBA Requirements:

The CBA is a required component of the IAPD. It must show a meaningful cost comparison was completed. It will:

- Outline the **nonrecurring** (design, development, and implementation) and **recurring** (operations and maintenance) costs for your existing system and each system alternative before developing the detailed narrative on each system for the CBA.